TC-355





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Specifications

J	pcontroactons
Power Requirements:	AC 50 60 Hz, 100, 110, 117, 125, 220
, •	or 240 Volts, 30W
	(Voltage Selector provided in the set)
Tape Speeds:	7½ ips, 3¾ ips, 1½ ips (19 cm s.
	9.5 cm/s, 4.8 cm/s) with instantaneous
	selection for equalization changes
Reel:	7 inches or smaller
Recording System:	4 Track Stereophonic or monophonic
	4T Erase Head, EF18-2902H2
	4T Record Head, RP30-2902
	4T Playback Head, PP30-2902A
Frequency Response:	20~25,000 Hz at 7½ ips (19 cm/s)
•	±3 dB 30~20,000 Hz at 7½ ips (19 cm/s)
	30~17,000 Hz at 3¼ ips (9.5 cm/s)
	30 ~ 9,000 Hz at 1% ips (4.8 cm/s)
Flutter and Wow:	Less than 0.15% at 7½ ips (19 cm/s)
	Less than 0.25% at 3¼ ips (9.5 cm/s)
Signal-to-Noise Ratio:	Better than 52 dB at 7½ ips (19 cm/s)
	Less than 1.6% at 7½ ips (19 cm/s)
Bias Frequency:	Approx. 160 KHz
Recording Time:	4 Track Stereophonic
(with 1.800 ft tape)	1 hr 30 min at 7½ ips (19 cm/s)
	3 hrs at 3¾ ips (9.5 cm/s)
	6 hrs at 1% ips (4.8 cm/s)
	4 Track monophonic
	3 hrs at 7½ ips (19 cm/s)
	6 hrs at 3% ips (9.5 cm/s)
	12 hrs at 17/4 ips (4.8 cm/s)
Inputs:	Microphone Inputs(2)
	Impedance, 600Ω (will accomodate any
	microphone with $250 \sim 1 \text{K}\Omega$ impedance)
	Sensitivity, -72 dBs (0.19 mV)
	Auxiliary Inputs(2)
	Impedance, 560KΩ
	Sensitivity, -22 dBs (0.06 V)
	REC P.B Connector(1)
	Impedance, $10K\Omega$ Sensitivity, -40 dBs (7.75 mV)
Outputs:	Line Outputs(2)
Outputs.	Impedance, 100KΩ
	Sensitivity, 0 dBs (0.775V)
	Headphone(1)
	Impedance, 8Ω
	Sensitivity, -28 dBs (31 mV)
	REC P.B Connector(1)
	Impedance, 10K \O
	Sensitivity, 0 dBs (0.775 V)
Transistors:	27
Diodes:	5
Dimensions:	$15\frac{1}{16}$ " (W) × $7\frac{1}{16}$ " (H) × 14 " (D)
	1000

Technical Feature

General Description

SONY Model TC-355 is a high quality 4 Track Stereo Taperecorder Deck, which can be operated in vertical position, designed for users who have desired the most faithful recording and reproduction as a successor of SONY Model TC-350.

Weight: 22 Lbs (10 Kg)

(386 mm \times 180 mm \times 355 mm)

Solid State Amplifier and High Frequency Bias Oscillator

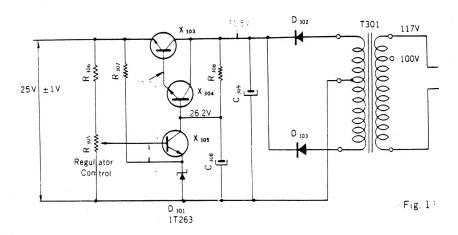
All Silicon transistors, which are used for Record Pre-Amplifier and Playback Pre-Amplifier installed in the unit, are newly developed [Advanced Passivated Mesa Silicon Transistor] in order to get extremely Low Noise and Low Harmonic Distortion. The bias frequency of the Set is as high as approximately 160 KHz which serves to obtain better S/N and lower distortion and also to prevent beat interference when recording signal from a Radio Receiver or a Tuner

Voltage Regulator Circuit

The circuit acts as follows:

This unit is equipped with Voltage Regulator Circuit which serves to keep Electrical Characteristics (Noise Figure, Harmonic Distortion, etc.) constant against variation of power source voltage.

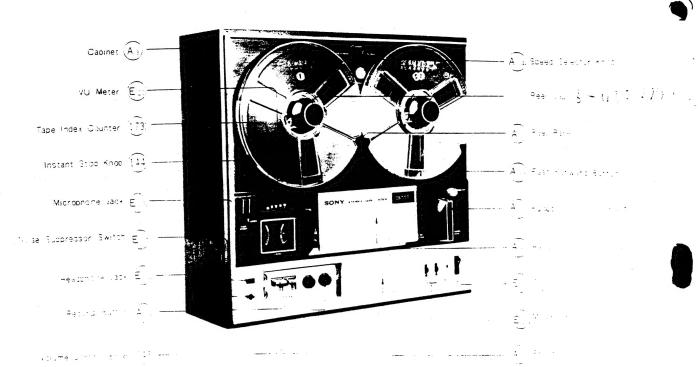
	X ₃₀₅ Base Bias	X ₃₀₅ Collector Current	X ₃₀₄ Base Bias	X ₃₀₄ Collector Current	X ₃₀₃ Base Blas	X ₃₀ 3 C-E Resistance	X ₃₀₃ Emitter Voltage
Power Source Voltage increases	Increases	Increases	Decreases	Decreases	Decreases	Increases	Decreases
Power Source Voltage decreases	Decreases	Decreases	Increases	Increases	Increases	Decreases	Increases



Block Diagram

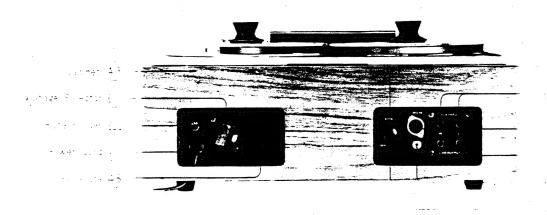
L-CHANNEL AUX ① RECORD and EO AMP PRE - AMP RP30 - 2902 REC.H101 X 101 102 X 103 . X 104 MIC [EF:3-2902H2 E 4101 $\alpha \times$ LINE OUT ◐ PP30 -2902A LINE OUT METER AMP BIAS OSC PRE - AMP P.B.H101 AMP X_{111} X 301 302 X 105.106 107 X :08 109 110 HEADPHONE REC/P.B CN R-CHANNEL RP30 - 2902 REC.H201 LAUX RECORD and EQ AMP PRE - AMP X 201 202 X 203 X 204 MIC 70L T4 3E REGULATIO BIAS OSC RECORD AMP PLAYBACK AMP LINE OUT AMP X 103 3.4 X 305 LINE OUT 125V 117V LINE OUT METER AMP PRE - AMP ठ ठ PP30 -2902A P.B.H201 POWER AMP RECTIFIER X 205 206 207 X 211 0 X 208 209 210 4

Cabinet Top View



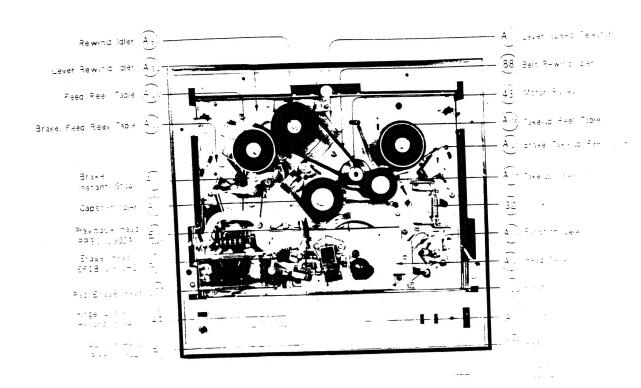
(Fig. 3)

Cabinet Back Men



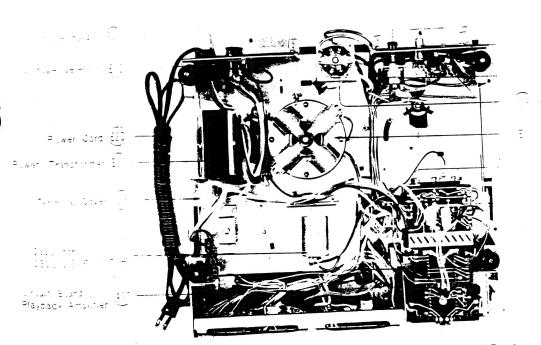
(Fig. 4)

Chassis Top View



(Fig. 5)

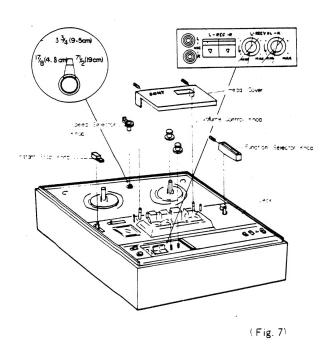
Chassis Bottome View



(Fig. 6)

Disassembly

Head Cover and Knobs Removal



Reel Panel Removal

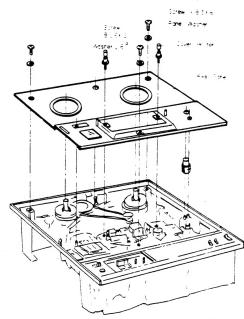
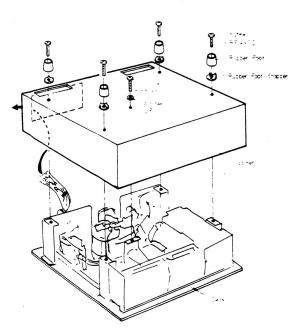


Fig. 8

Chassis Removal



(Fig. 9)

Sash Removal

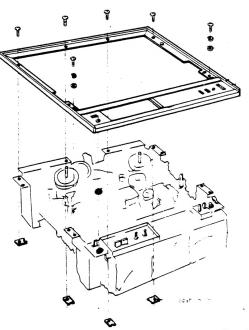
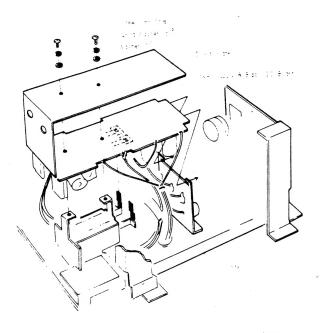


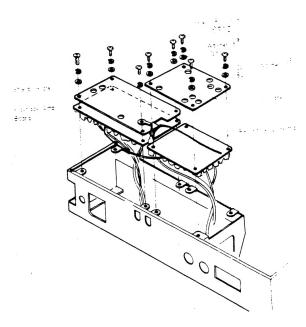
Fig. 10

Mounted Circuit Board Removal

Power Supply and OSC Section

Record and Playback Amplifier Sections





(Fig. 11)

Fig. 12)

Modification to Different Power: Line Frequency,

Parts to be changed	For 50 Hz	For 60 Hz
Connection between terminals of the MP Capacitor, C310	Connect as shown in Fig. A	Connect as shown in Fig. B
2. Motor Pulley	Part No.: 3-444-064-01	Part No.: 3-444-063-01

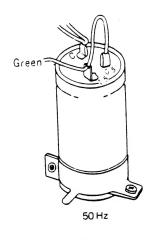


Fig. A

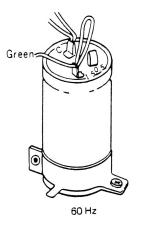


Fig. B

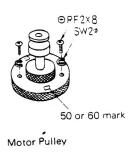
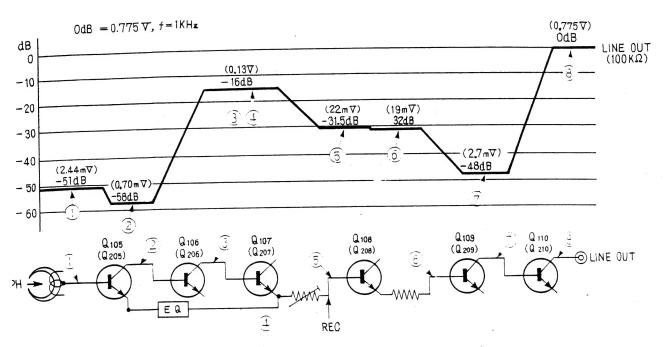


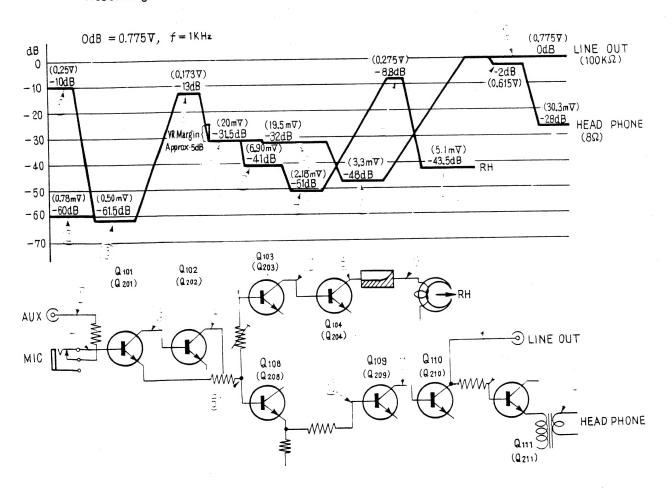
Fig. C

Level Diagram

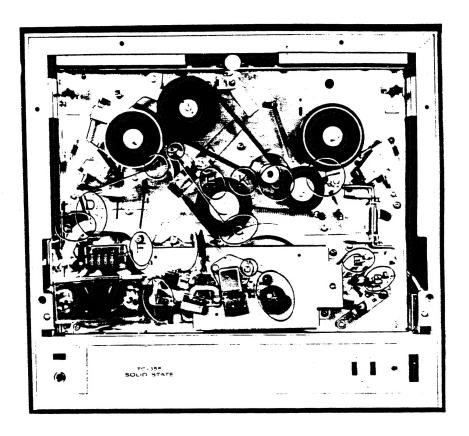
Playback

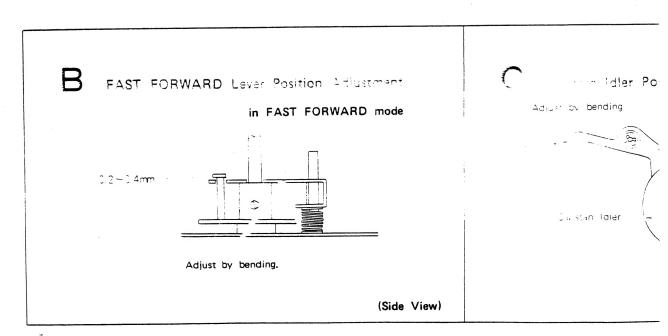


Recording

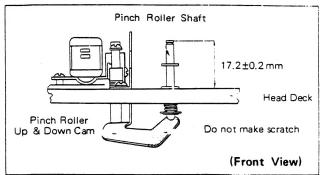


Mechanical Adjustment



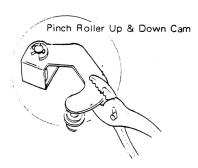


A Pinch Roller Shaft Height Adjustment

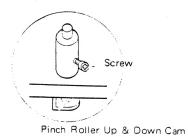


1 When adjusting roughly Adjust by bending with pliers as shown below.

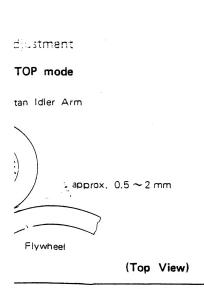
2 When adjusting accurately Adjust to obtain 17.2±0.2 mm by loosening Screw and moving Shaft up or down. After fastening Screw, apply Lock Paint.

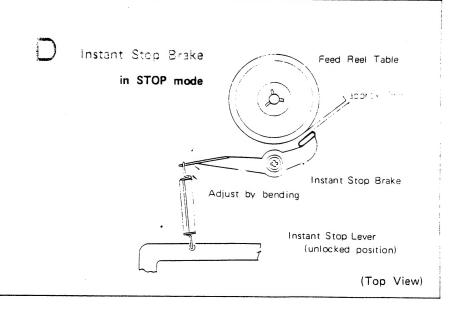


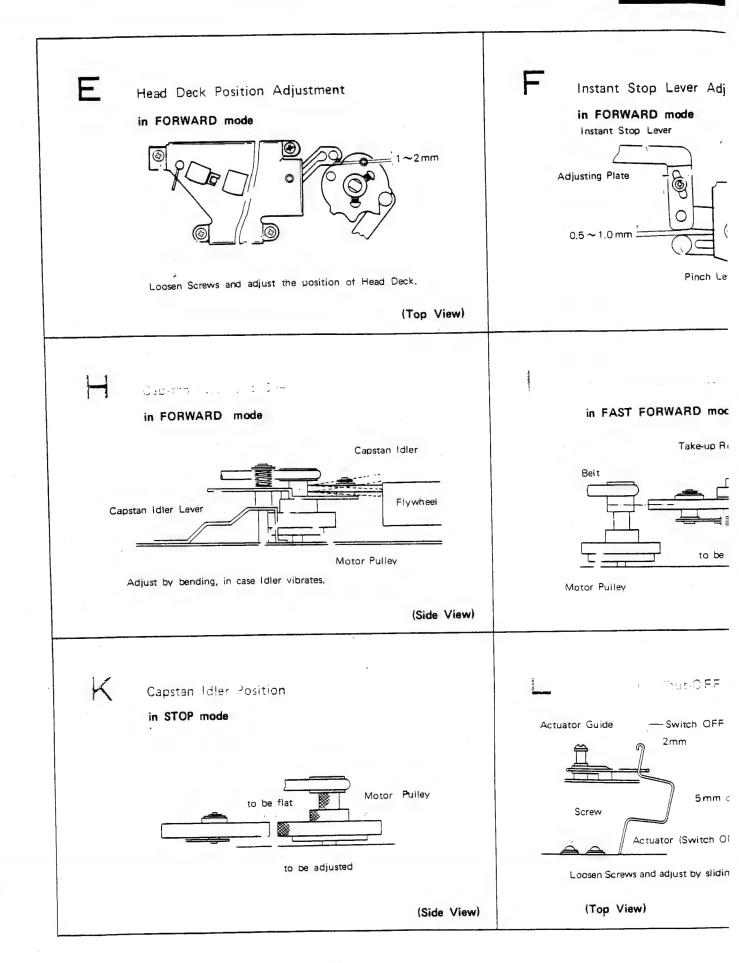
(Bottom View)



(Top View)

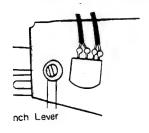






r Adjustment

Loosen Screws and adjust the position of Adjusting Plate.

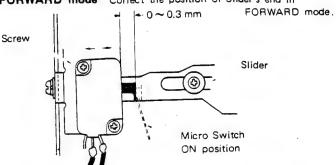


(Top View)

G

Bias ON/OFF Switch Position Adjustment

in FORWARD mode Correct the position of Slider's end in

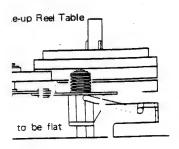


Loosen Screw shown and adjust by sliding Switch Holder.

(Top View)

diustment

) mode

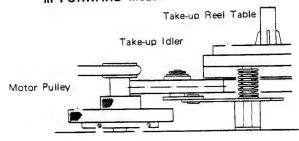


Adjust by bending.

(Side View)

Take-up Idler Position Adjustment

in FORWARD mode



Loosen Screws and adjust the height of Motor Pulley.

(Side View)

William Adjustment

n OFF position

Tape Guide

Erase Head 5mm or more vitch ON position) Actuator Guide

by sliding Micro Switch Holder

(Side View)

NOTE

In case the following parts are soiled with oil or dust, clean them with alcohol.

- · Feed Reel Table Rim
- · Motor Pulley
- Take-up Reel Table Rim
- · Flywheel Rim
- · Reel Spindle
- · Capstan
- · Take-up Idler
- · Pinch Roller
- Capstan Idler
- · Tape Index Counter
- Rewind Idler
- · Heads
- Rewind Belt

Electrical Adjustment

Item	Signal Source	Output Connection	
/oltage Regulator Adjustment		V. T. V. M. across Emitter of Transistor X ₃₀₃ and Ground	STOP
Playback Head Azimuth Alignment	10KHz, 1st Section of SONY Alignment Tape Type: N-19-F2	$V,T,V,M,$ and $100\text{K}\Omega$ Resistor in parallel to LINE OUT	PLAYBACK
Meter Level Adjustment	700Hz, 2nd Section of SONY Alignment Tape Type: N-19-F2	V.T.V.M. and 100K Ω Resistor in parallel to LINE OUT	PLAYBACK
Playback Equalizer Adjustment (1) 7½ ips (19 cm/sec)	SONY Alignment Tape Type: N-19-F2	$V,T,V,M,$ and $100K\Omega$ Resistor in parallel to LINE OUT	PLAYBACK
Playback Equalizer Adjustment (2) 334 ips (9.5 cm/sec)	SONY Alignment Tape Type: J-9-F2	V.T.V.M. and 100KΩ Resistor in parallel to LINE OUT	PLAYBACK
Trap Coil Adjustment		V. T. V. M. and 100KΩ Resistor in parallel to Test Point and Ground See Fig. 13	RECORD
Record Head Height Adjustment	1 KHz, -60 dBs (0.78 mV) to MIC INPUT	V.T.V.M. and $100\text{K}\Omega$ Resistor in parallel to LINE OUT	RECORD and to TAPE POS
Record Head Azimuth Adjustment	15 KHz, -90 dBs (23//V) to MIC INPUT	V. T. V. M. and $100\text{K}\Omega$ Resistor in parallel to LINE OUT	RECORD and to TAPE POS
Recording Bias Adjustment	1 KHz, -60 dBs (0.78 mV) to MIC INPUT	V.T.V.M. and $100 \text{K}\Omega$ Resistor in parallel to LINE OUT	RECORD and to TAPE POS
Recording Level Adjustment	1 KHz, -60 dBs (0.78 mV) to MIC INPUT	$V,T,V,M,$ and $100K\Omega$ Resistor in parallel to LINE OUT	RECORD and to TAPE POS
Recording Equalizer Adjustment	1 KHz, -90 dBs, (23/4V) to MIC INPUT	V. T. V. M. and $100\text{K}\Omega$ Resistor in parallel to LINE OUT	to TAPE POS
Dummy Coil Adjustment	5 KHz90 dBs (23gV) to MIC INPUT	V.T.V.M. and 100KΩ Resistor in parallel to LINE OUT	RECORD and to TAPE POS at 1

NOTE:

- 1. Before adjustments, clean and demagnetize the Erase Head, Record Head and Playback Head.
- 2. The adjustments should be performed in the tape speed of 7% ips (19 cm sec), unless otherwise specified.
- 3. The Sound-on-Sound Switch (S_{301}) and Noise Suppressor Switch $(S_{103} \& S_{203})$ should be set in the OFF Position.
- 4. The following test equipment is to be provided for these adjustments.
 - (1) Audio Generator (2) Attenuator (600 ohms) (3) V.T.V.M. (4) 100KΩ Resistor (5) SONY Alignment Tape T
- 5. After adjustments, apply Lock Paint to the adjusted points.

	Adjust	Remarks
	R ₃₉₅ : 100 KΩ (B)	Adjust the Adjustable Resistor to obtain $\pm 25V \pm 1V$ on V.T.V.M.
	Azimuth Alignment Screw See Fig. 14	Adjust to obtain maximum reading on V. T. V. M.
	L-CH: R ₁₅₉ 5 KΩ (B) R-CH: R ₂₅₉ 5 KΩ (B)	 Adjust Adjustable Resistors (R₁₄₀ & R₂₄₀) to obtain 0 dBs (0.775V) on V.T.V.M. Adjust Adjustable Resistors (R₁₅₉ & R₂₅₉) so that Level Meters indicate the boundary between the red zone and the white zone.
		Deviation against level at 700 Hz of 3rd Section
	L-CH: R ₁₃₆ 4.7 KΩ (B)	Tape Section 4th 5th 6th 7th 10 KHz 7.5 KHz 100 Hz 50 Hz
	R-CH: R ₂₃₆ 4.7 KΩ (B)	L-CH 0±2 dB 0±2 dB -4.0±2 dB -4.0±2 dB -6.5±2 dB
		R-CH 5.0±2 dB - 6.5±2 dB - After the adjustment, repeat the Meter Level Adjustment.
		Deviation against the level at 500 Hz of 3rd Section
		The Oak
	1 211 B 4 7 KO (B)	Tape Section 4th 6th 7th 8th 8th 5th 5th 5th 5th 5th 5th 5th 5th 5th 5
	L-CH: R_{137} 4.7 KΩ (B) R -CH: R_{237} 4.7 KΩ (B)	2 ± 2 dB 4 ± 2 dB
		L-CH 0±2 dB 0±2 dB 2.5±2 dB 5±2 dB
	L-CH: L ₁₀₂ 1.8 mH R-CH: L ₂₀₂ 1.8 mH	Adjust to obtain minimum reading on V.T.V.M.
nitor Switch	Height Alignment Screw See Fig. 14	 Turn the Height Alignment Screw to obtain maximum reading on V.T.V.M. and also turn the Swing Alignment Screw and the Azimuth Alignment Screw to obtain maximum reading on V.T.V.M. Repeating Step 1, Adjust the Alignment Screws to obtain maximum reading on V.T.V.M.
nitor Switch	Azimuth Alignment Screw See Fig. 14	Adjust to obtain maximum reading on V.T.V.M.
nitor Switch	L-CH: C ₁₁₂ 30~200 pF R-CH: C ₂₁₂ 30~200 pF	 Turn the Trimmer Capacitor counter-clockwise fully. Turn the Trimmer Capacitor clockwise slowly. The V.T.V.M. reading will go up, reaching a maximum and then falling again. Continue to turn the Trimmer Capacitor untill the V.T.V.M. reads 0.5 dB below from the maximum value.
nitor Switch	L·CH: R ₁₁₄ 5 KΩ (B) R·CH: R ₂₄ 5 KΩ (B)	 Set the Monitor Switch (S₁₀₂ & S₂₀₂) to the Source Position. Feed the Signal to MIC INPUT and turn the Record Volume Controls (R₁₁₂ & R₂₁₃) clockwise so that Level Meters indicate the boundary between the red zone and the white zone. Record the signal on a blank Tape. Set the Monitor Switch (S₁₀₂ & S₂₀₂) to the Tape Position and playback the signal recorded in the Step 3. Adjust the Adjustable Resistors (R₁₁₁ & R₂₁₄) to obtain 0 dBs (0.775V) on V.T.V.M.
nitor Switch	L-CH: L ₁₀₁ 1.8, 1.45 mH R-CH: L ₂₀₁ 1.8, 1.45 mH	 Read Line Out Level on V.T.V.M. Feed a 20 KHz, -90 dBs (23/v) to MIC INPUT and record it. Playback a signal recorded in Step 2, and adjust the Equalizer Coil (Lint & Lint) to obtain just the same level comparing with Step 1. [V.T.V.M. indicates approx. 0 dBs (0.775V)]
nitor Switch	L-CH: L ₁₀₃ 1 mH R-CH: L ₂₀₃ 1 mH	 Record the signal with STEREO and playback it. Record the signal only LEFT (RIGHT) Channel and playback it and adjust the Dummy Coil L₁₀₃ (L₂₀₃) to obtain just the same level comparing with Step 1.

6. Bias Voltage across Head shall be read with the

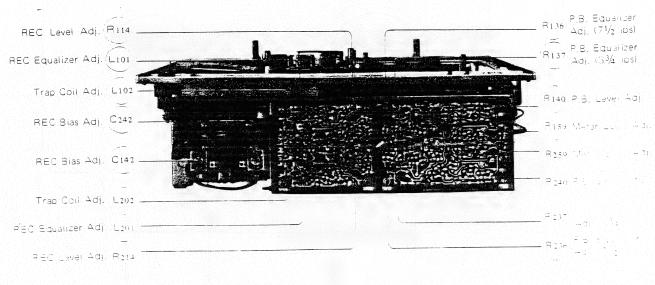
following values on V. T. V. M.

Record Head: approx. $11 \sim 21$ voits

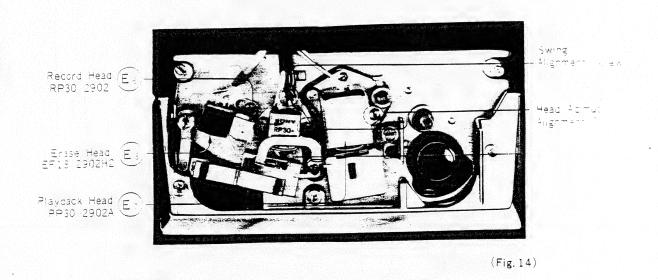
Erase Head: .approx, 155 ~ 215 volts

F2 & J-9-F2 (6) Blank Tape

Adjusting Positions



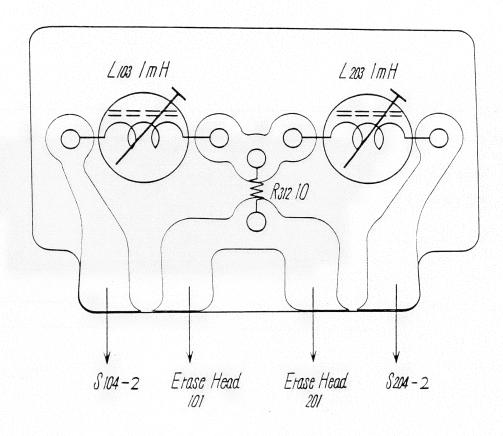
(Fig. 13)



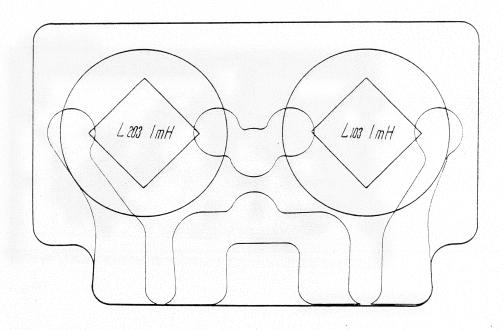
Mounting Diagram

Sub Board Section

-Conductor Side-



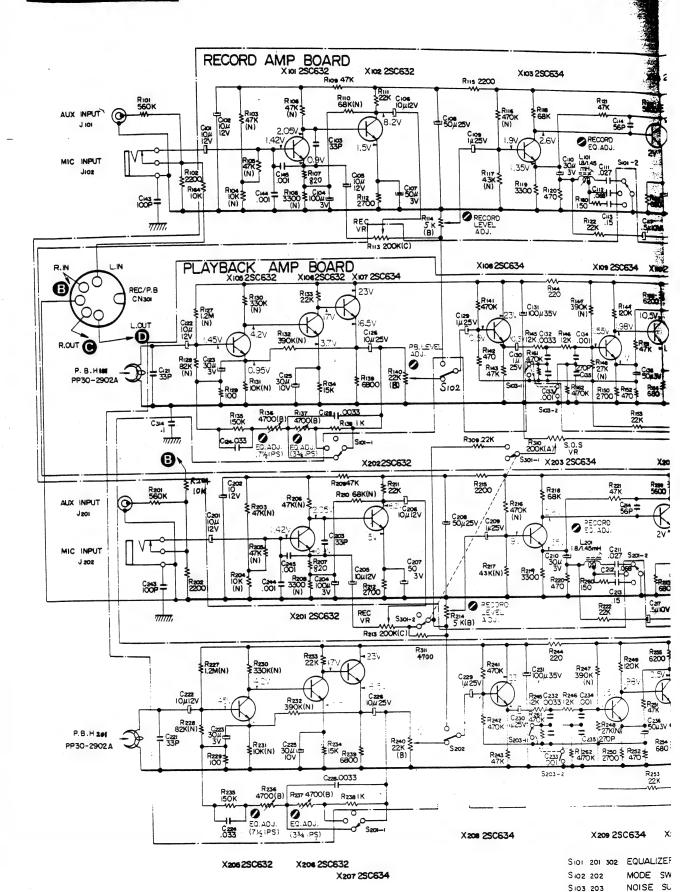
-Component Side-

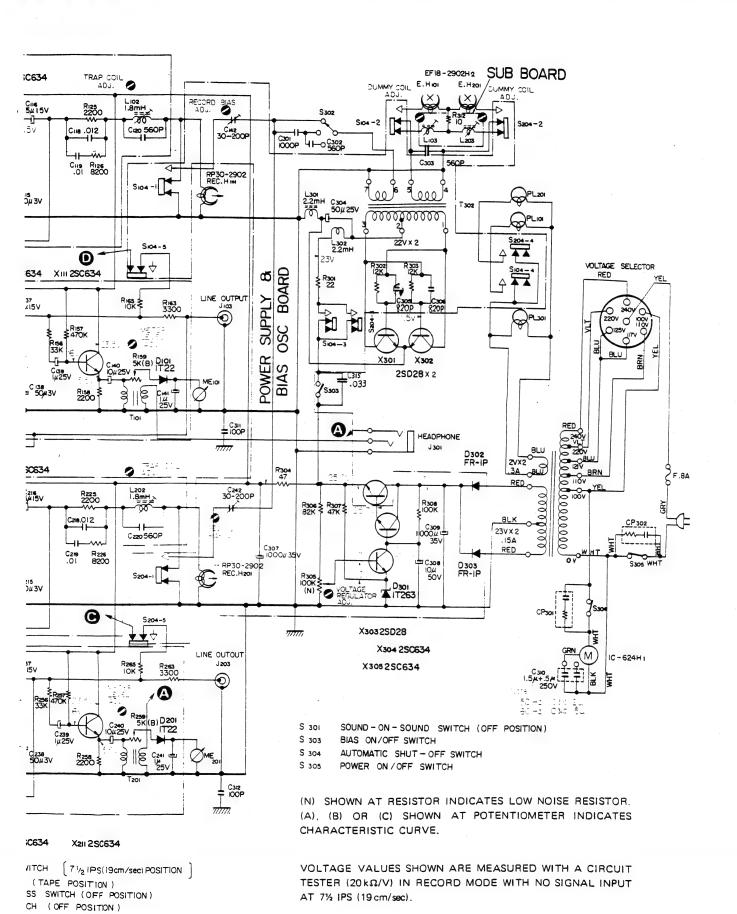


RECORD

S 104 204

Schematic Diagram

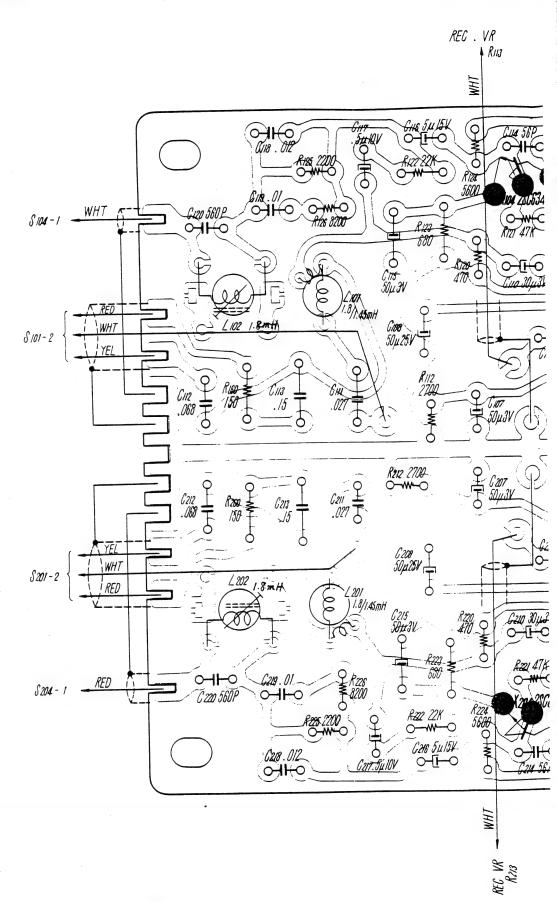


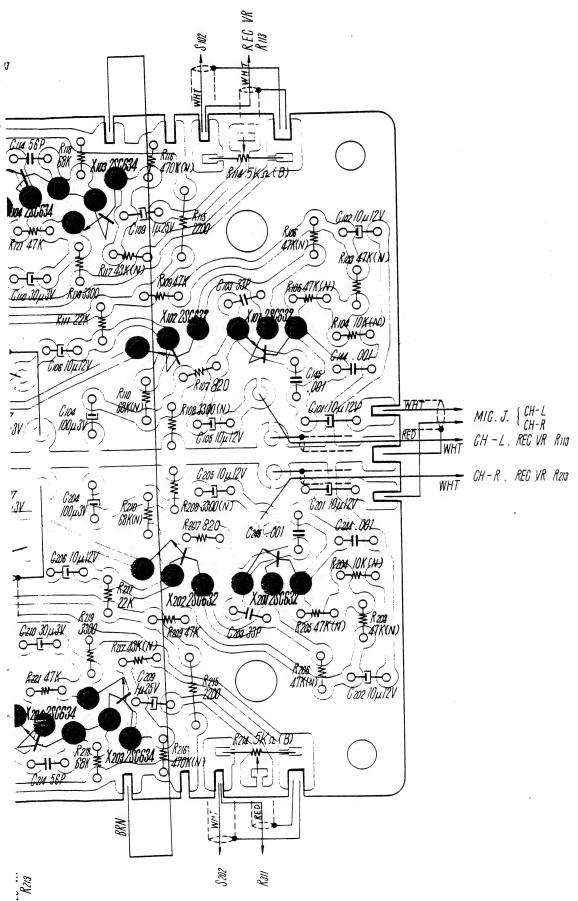


Mounting Diagram

Record Amplifier Board Section

-Conductor Side---

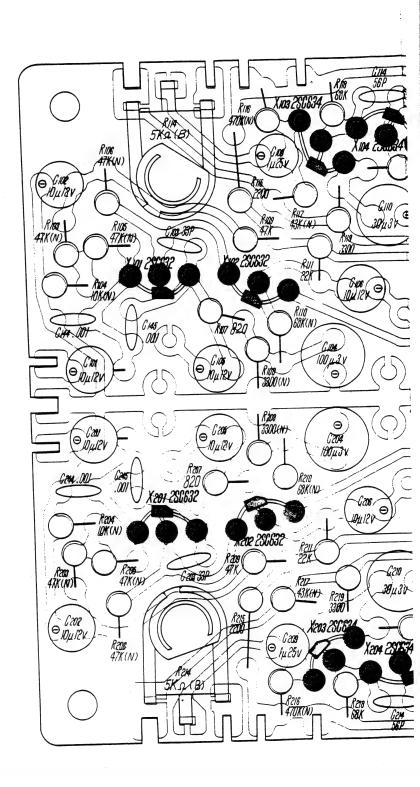


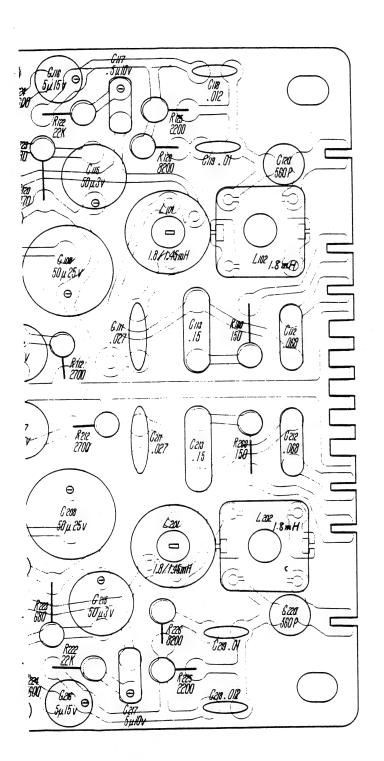


Mounting Diagram

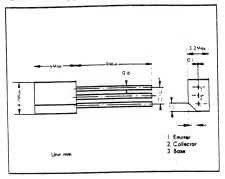
Record Amplifier Board Section

-Component Side-

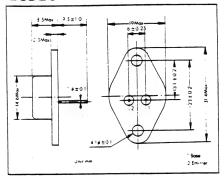




2SC63 [] Transistor



2SD28 Transistor



Mounting Diagram Playback Amplifier Board Section -Conductor Side-8101-1 \$102 ¥ Œ 0-W-0 R/38/K \$44330K(A) Cina 1033 C131 100µ35V R137 4700 [8 R127 L2M(N) R45 12K R135 150K ROZZ JAJOK(N) 82K(N) Crzedji 25V CHOOK HUZ. **√WHT** C122 10 112V CH-L P.B.H. R229 100 WHT CH-R P.B.H C200 14251 124.033 0-11-0 X200 286632 R233-22K REET RESULT R245 T2K X207 286634 R240 22K(B) R247-390K (N) WHT 75 Œ

8201-1

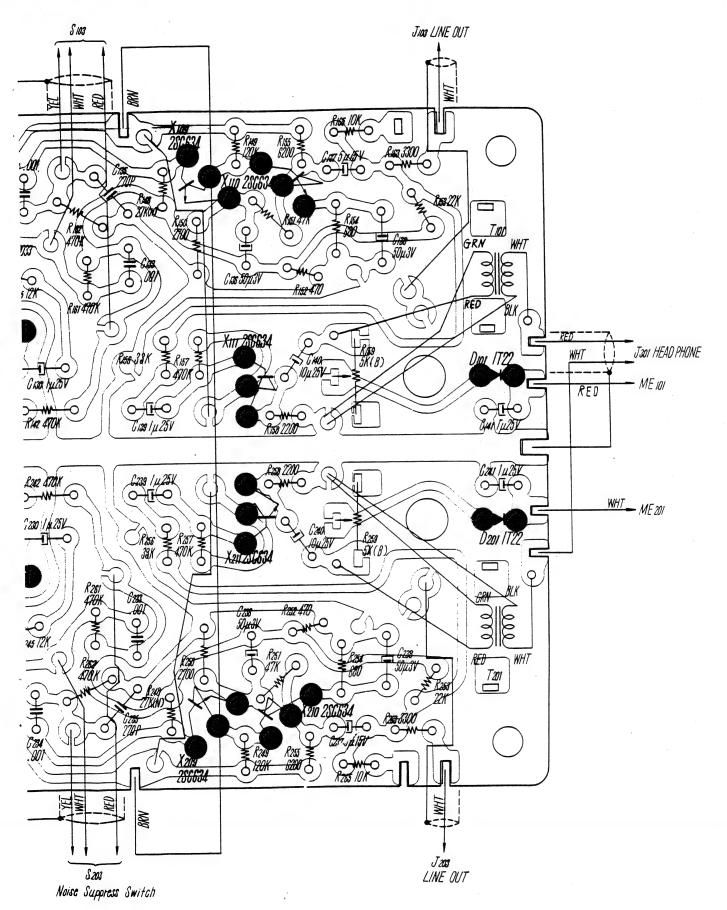
Equalizer Switch

\$ 202

Noi

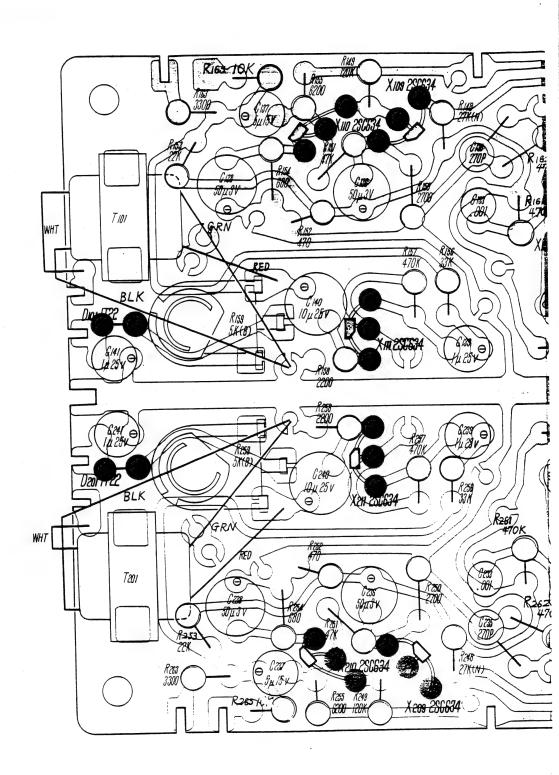
Mode Switch

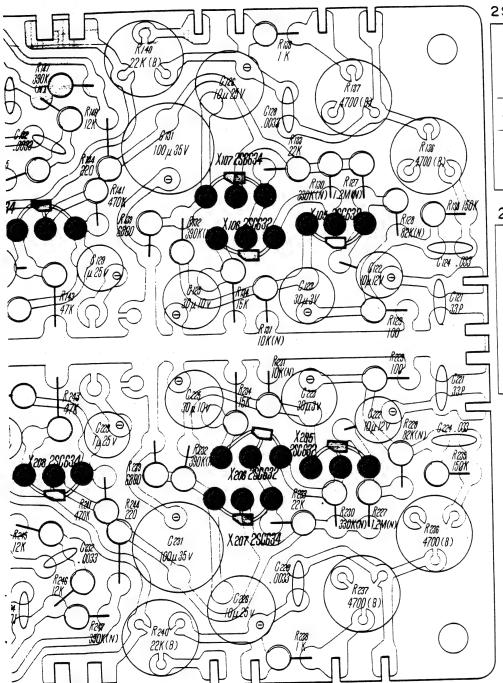
55 TC-355



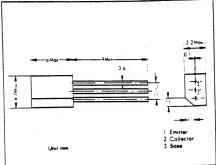
Mounting Diagram

Playback Amplifier Board Section
—Component Side—

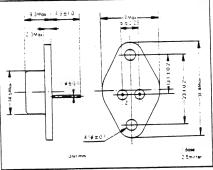


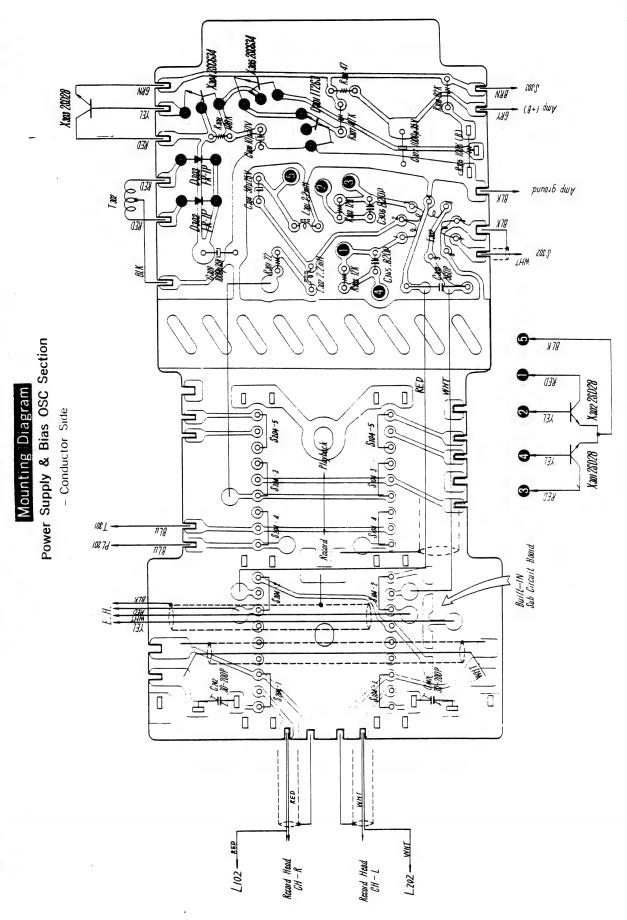


2SC63 [] Transistor



2SD28 Transistor



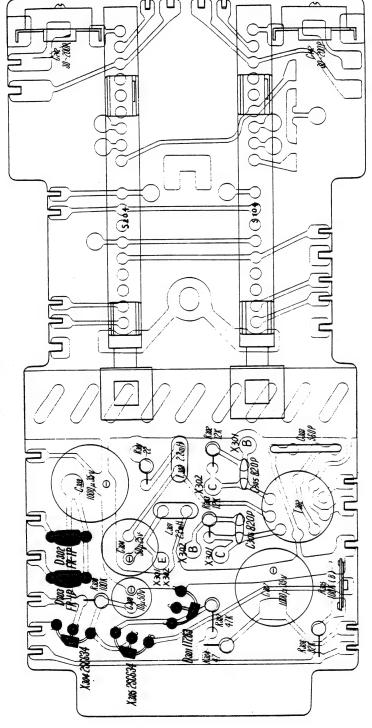


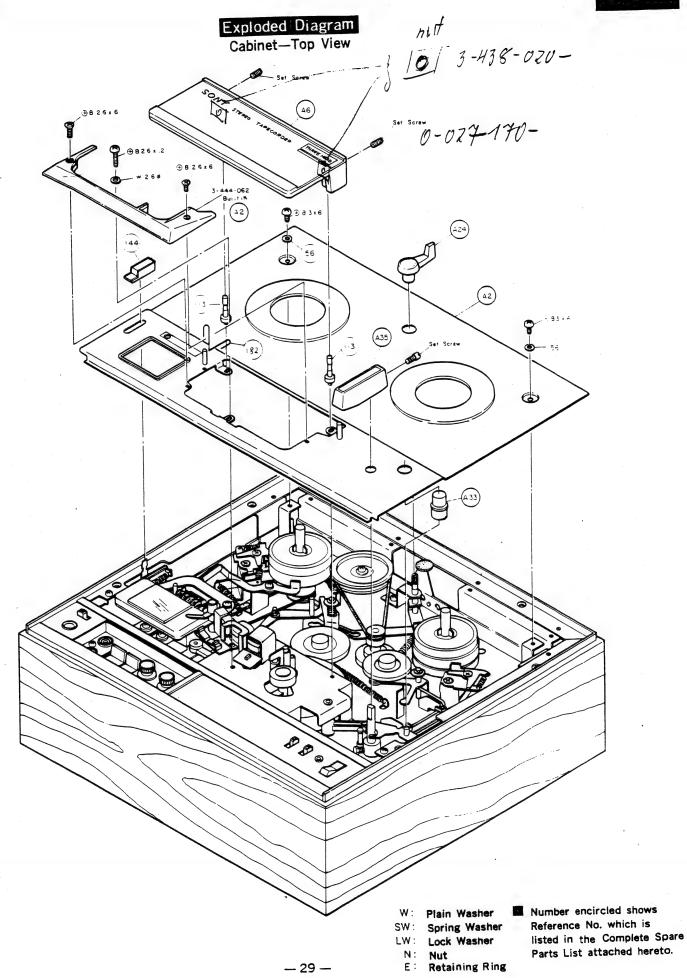
*

Mounting Diagram

Power Supply & Bias OSC Section

Component Side

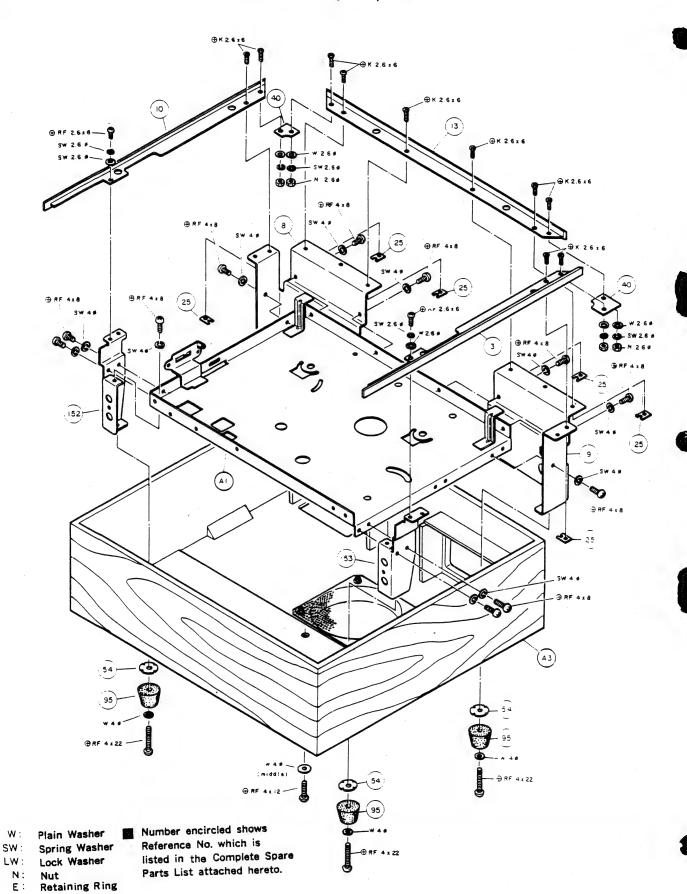


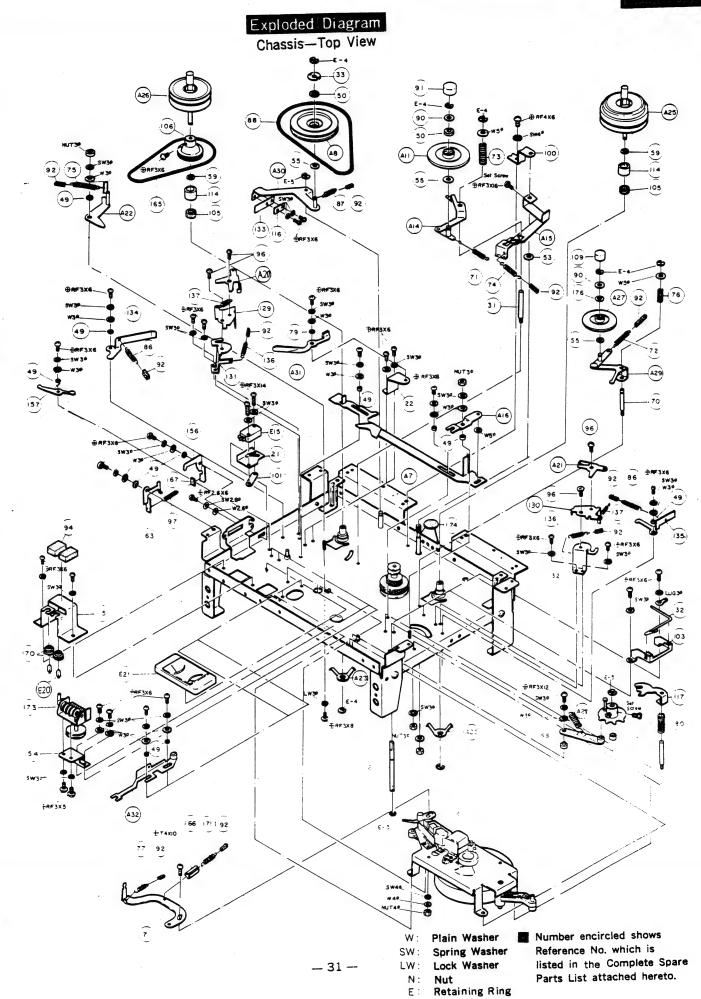


_ 29 _

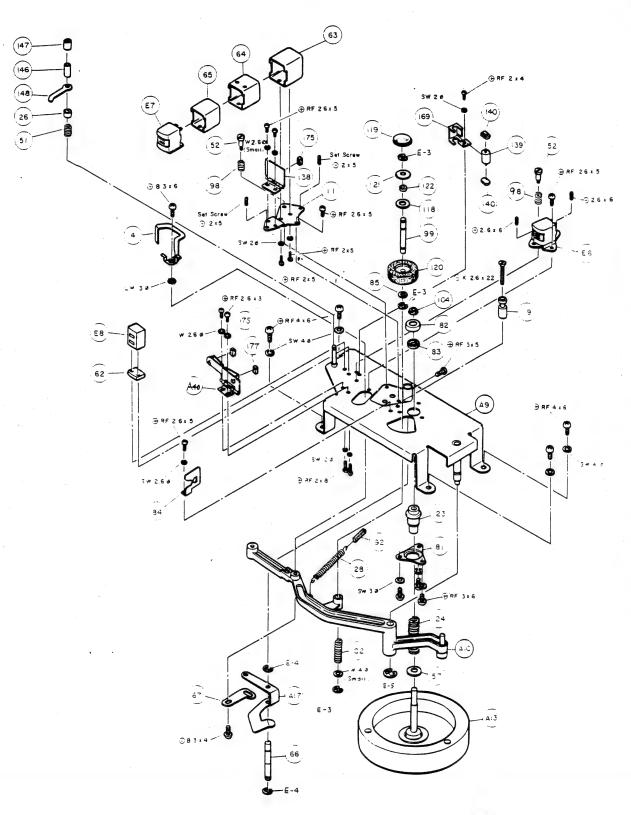
Exploded Diagram

Chassis Assembly —Top View





Exploded Diagram Head Deck—Top View

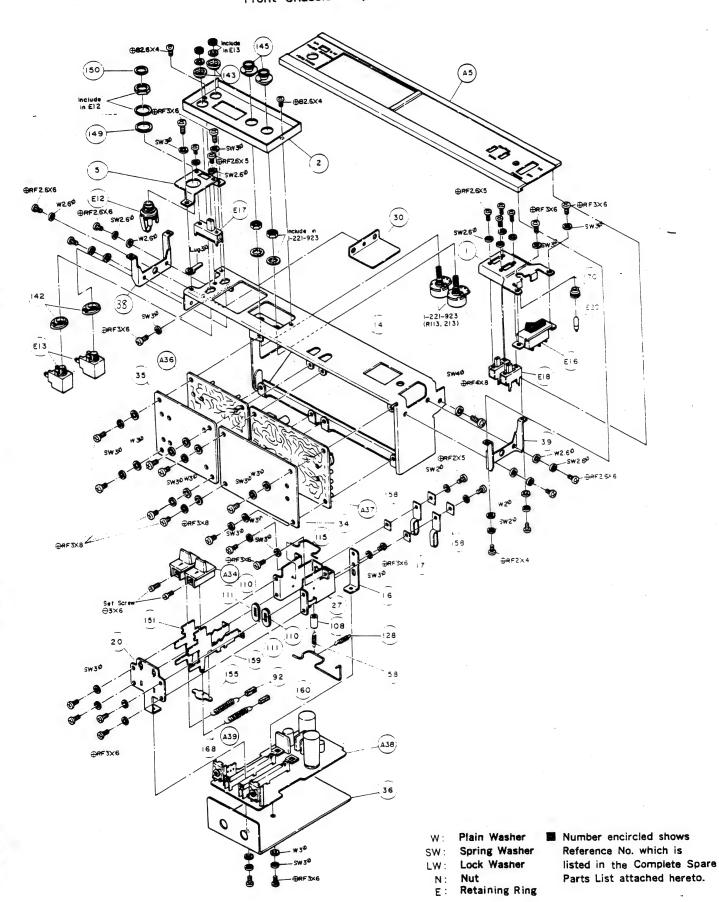


W: Plain Washer
SW: Spring Washer
LW: Lock Washer

N: Nut E: Retaining Ring Number encircled shows Reference No. which is listed in the Complete Spare Parts List attached hereto.

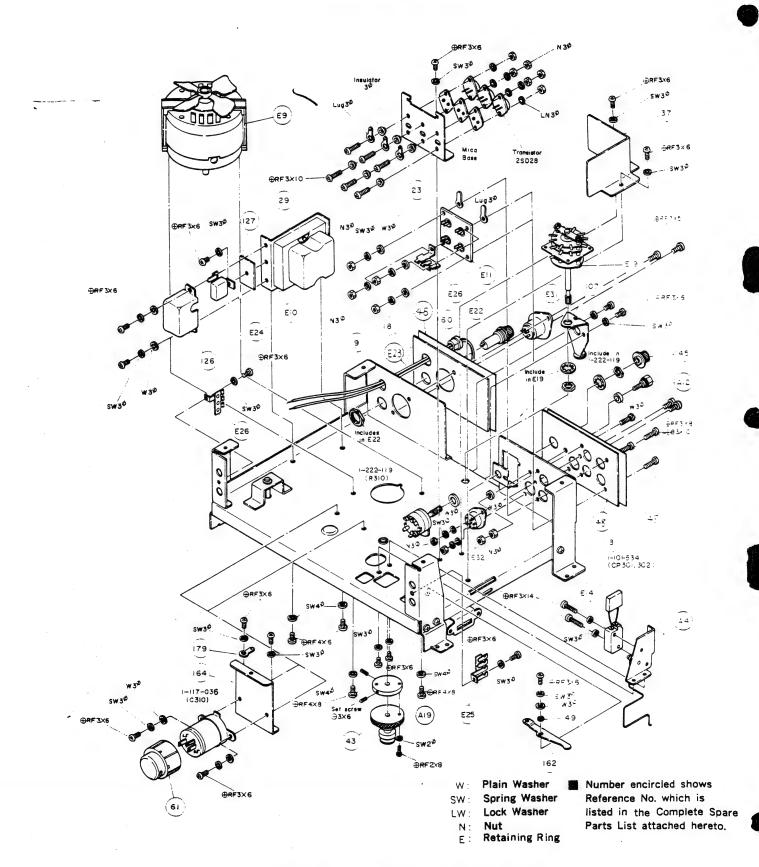
Exploded Diagram

Front Chassis—Top View



Exploded Diagram

Chassis - Bottom View



COMPLETE SPARE PARTS LIST FOR TC-355

(for GENERAL EXPORT Model)

FEBRUARY, 1970

			Unit
Ref.		Proposition of the control of the co	Price
No.	Part No.	Description	
		MECHANICAL PARTS	
	x-34440-01	Base Plate Ass'y	
A1	X-34440-01	Dool Donel Ass'y	
A2	X-34440-03	Complete Cabinet Ass!v	
A3	x-34440-04	Actuator Ass'v automatic shut-off	
A4	X-34440-05	Coch Acciv front panel	
A5	X-34440-07	Hand Cover Agg'v	
A6	X-34440-09	Idlam Agg 'v rewind	
A8	X-34440-10	Head Deck Ass'v	
A9	X-34440-11	Pinch Layer Ass'y	
A10	X-00270-03	Idlor Ace'y canstan	
A11	X-20319-01	Terminal Strips Ass'v (small type)	
A12	X-34180-04	Flumbeel Ass'v capstan shall	
A13	X-34180-04	Idler Arm Ass'v capstan	
A14	X-34180-08	Lever Ass'y, speed selector	
A15	X-34180-08 X-34180-14	Toint Lever Ass'v. function selector	
A16	X-34100-14	cam & slider	
	x-34180-27	Cam Ass'v ninch roller up & down	
A17	X-34180-27 X-34180-30	Arm Ass'v stepper	
A18	X-34180-33	Mounting Plate Ass'y, motor pulley	
A19	X-34180-33 X-34300-02	Lever Ass'y, capstan idler release	
A22	X-34300-02 X-34300-03	Spring Ass'v take-up and feed reel table	
A23	X-34300-09	Vach Agg'v speed selector	
A24	x-34300-09	Pool Table Ass'v take-up	
A25	X-34300-14 X-34300-15	Pool Table Ass'v feed reel	
A26	x-34300-15 x-34300-25-8	Talom Acciu take-up	
A27	X-34300-25	Com Aggly function selector	
A28	X-34300-27	Tarram Acc'u taka-un idler	,
A29	X-34360-15	I amor Agg'y rewind	
A30	X-34360-17	Proko Agg'u ingtant StOD	
A31	X-34380-08	Took Agg'v stonner	•
A32	X-34380-00 X-34380-10	Purton Agg'v fast forward	•
A33	X-34380-10 X-34380-11	Ruffon Ass'v. record	•
A34	X-34380-11 X-34380-13	Knob Ass'y, function selector	•
A35	X-34440-51-1	Mounted Circuit Board, record amplifier	•.
A36	X-34440-51-1 X-34440-52-1	Mounted Circuit Board, playback amplifier	-
A37	V-74440-77 at	1,000	

lef. <u>lo</u> .	Part No.	Description	Unit <u>Price</u>
	- x-34440-53-1	Mounted Circuit Board, power supply	
440	x-34440-12	tapo pau hinge & bias OSC.	
139	x-34440-54-1	Mounted Circuit Board, dummy coil	
337	x-34420-06	marian Caming Agg v take-up	
	X-34510-35	proloc (A) Agg v feed	
	x-34510-37	Duele Aggly take-up	
1	3-444-017	President spessy switch	
2	3-444-018	Ownemental Plate jack	
3	3-444-019		
4	3-444-020	Shifter, head pad	
5	3-444-021	no the binoural idek	
6	3-444-022	Transmit Angtont Stop	
7	3-444-023	T inchant Chan	
8	3-444-025	Deschot inch (A)	
9	3-444-026	Bracket, jack (B) Bracket, jack (B)	
10	3-444-027	Sash B	
	3-444-029	spring, hing @	
13	3-444-030	Sash C	
15	3-444-032	Bracket, VU meter holder	
16	3-444-033	Bracket, record switch	
17	3-444-034	Spring, record switch holder	,
18	3 -444 -035	Ornamental Plate, jack A	
20	3-444-038	Supporter, record lever	
21	3-444 - 039	Holder, microphone switch	
22	3-444-040	Retainer, instant stop brake lever	-
23	3-444-041	Bracket, power print	
24	3-444-042	Cover, switch	_
25	3-444-043	Nut, sash retainer	-
26	3-444-044	Tape Guide (lower part)	
27	3-444-045	Support, record change-over	-
28	3-444-046	Helical Spring	_
29	3-444-047	Holder, transformer	-
30	3-444-048	Chiald Plare	
31	3-444-049	Shaft, fast forward idler	-
32	3-444-050	Clank	-
33	3-444-051	Shield Paper A	_
34	3-444-052	Shield Paper B	_
35	3-444-053	Shield Paper C	_
36	3-444-054	Shield Plate B	_
37	3-444-055	Holder, sash A	-
38	3-444-057	11 1 1 D	-
39	3-444-058	Retainer, sash	-
40	3-444-059	ketainer, sasu /	
	3-11-065	Hinge rec./erasoliend	

2/14 (TC-355 GENERAL EXPORT Model)

Ref.	Part No.	<u>Description</u>
41 .	3-444-060	Tension Spring
42	3-444-061	Insulator, terminal strips
43	3-444-063-01 - 13	Motor Pulley 50 Hz
	3-444-064-01 - 13	Motor ruriey 30 Hz
44	X-34440-12	Hinge Ass'y, head pad
45	3-444-071	Cover, jack plate A
46	3-444-072	Cover, jack plate B
47	3-444-602	Name Plate,
48	3-444-601	Ornamental Plate A, jack
49	0-027-134	Shaft, stepper
50	0-027-216	Oil Ring (B), 5 p
51	3-103-238	Spring, tape guide adjustable
52	3-401-068	Screw, head adjusting
53	3-402-764	Stopper, rubber foot
54	3-403-724	Washer, drive wheel; thrust
55	3-405-407	Washer, reel panel
56	3-409-108	Lock Spring
58	3-409-158	Washer, idler; thrust
59	3-409-163	Stopper, cord; small
60	3-410-032	Cap, capacitor
61	3-410-044	Washer, erase head
62	3-412-080	Code shield A
63	3-412-119	Cago shield B
64	3-412-120	Case, shield C
65	3-412-121	Shaft, pinch roller up & down adjustable
66	3-418-009 3-418-011	Toint pinch lever & shifter
67	3-418-011	Spacer stepper arm
68	3-418-055	Shaft, lock lever
69	3-418-060	Shafr, idler arm: speed selector lever
70	3-418-000	guide shifter
71	3-418-069	Spring, idler arm
72	3-418-070	Spring, idler arm (horizontal use)
73	3-418-073	Spring, idler arm shaft (vertical use)
74	3-418-074	Spring lever (horizontal use)
75	3-418-075	Spring, idler release lever
76	3-418-077	Spring, idler arm shatt (vertical use)
77	3-418-079	Spring, lever
78	3-418-085	Spacer, function selector cam shall
79	3-418-086	Spacer, brake lever
80	3-418-091	Spring lock lever shaft
81	3-418-107	Support canstan bearing
82	3-418-111	Cap, capstan bearing

Ref. No.	Part No.	Description	Unit
<u>no</u> .			<u>Prica</u>
83	3-418-112	Oil Ring, capstan bearing	
84	3-418-113	Tape Support, right	
85	3-418-115	Nylon Washer, 8 ø (outer diameter)	
		pinch roller	
86	3-418-200	Spring, brake A	
87	3-418-201	Spring, brake B	
88	3-418-208	Belt, rewind idler	
89	3-419-070	Sticker, on cabinet bottom	
90	3-419-098-21	Washer; nylon	
91	3-419-211	Cap, rewind idler	
92	3-420-076	Rubber Foam Cushion (noise absorber)	
94	3-423-130	Rubber Foam Cushion	
95	3-424-049-05	Rubber Foot	
96	3-425-185	Shaft	
97	3-426-502	Helical Spring	
98	3-428-132	Helical Spring	
99	3-430-113	Shaft, pinch roller	
100	3-430-154	Bracket, speed selector shaft	
101	3-430-155	Plate, automatic shut-off actuator switch	
102	3-430-156	Spring, pinch lever cam	
103	3-430-157	Bracket, recording clank	
104	3-430-159-02	Washer, capstan shaft; black	
105	3-430-160	Washer, take-up and feed reel spindle	
106	3-430-161	Pulley, tape counter	
107	3-430-162	Bracket, speed equalizer switch	
108	3-430-170	Spacer, lock lever	
110	3-430-199	Washer, recording button; black	
111	3-430-200	Washer, recording button; black	
112	3-430-201	Shaft, function selector	
113	3-430-203-02	Shaft, head cover	
114	3-430-206	Cap, take-up and supply reel spindle	
115	3-430-212	Rod, record locking	
116	3-430-223	Lever, joint supply and take-up reel	
		brake arm	
117	3-430-227	Cam, fast forward; lever	
118	3-430-231	Oil Ring, pinch roller	
119	3-430-232	Cap, pinch roller	
120	3-430-233	Roller, pinch	
121	3-430-234-01	Washer, pinch roller; mylar	
122	3-430-235	Spacer, pinch roller; metal	
123	3-430-237	Retainer, capstan shaft	
126	3-431-203	Cap, terminal	
127	3-431-204	Insulator, terminal; fiber	
		•	

Unit <u>Price</u>

Ref.	Part No.	<u>Description</u> <u>I</u>
128	3-432-152	Helical Spring
129	3-436-067	Brake, S2
130	3-436-068	Brake, T2
131	3-436-069-02	Brake, S3
132	3-436-070-03	Brake, T3
134	3-436-072-04	Joint Lever, feed reel
135	3-436-073	Joint Lever, take-up
136	3-436-075	Helical Spring
137	3-436-076	Helical Spring
138	3-436-122	Plate, head shield
139	3-437-170	Roller, joint
140	3-437-171-04	Retainer, roller shall
142	3-437-228	Insulator (A), miniature jackInsulator (B), miniature jack
143	3-437-229-01	Knob, instant stop
144	3-437-271	Knob, volume control (S)
145	3-437-275	T C. ido (R)
146	3-437-306	Tape Guide (C)
147	3-437-307	Botolog tape quide (A)
148	3-437-309	Wecher insulator
149	3-437-423	The lating Washer hinaural lack
150	3-437-436 3-438-028	I among the court (A) ===================================
151	3-438-028	Tan -10+0 (10ft)
152	3-438-031	Inc. plate (right)
153 154	3-438-033	Procleat tand index counter
155	3-438-037	Procket leaf switch
156	3-438-038	Procket instant stop shifter (A)
157	3-438-039	Procket instrat Stop Shifter (B) ========
158	3-438-040	Detainer plate enring
159	3-438-041	Towar record (B)
160	3-438-044	Took Towar clank
161	3-438-046	Full Rod, lock plate
162	3-438-047	Bracket instant Stop lock
163	3-438-048	Bracket, instant stop shifter (C)
164	3-438-050	Holder, capacitor
165	3-438-053	Belt, tape index counter
166	3-438-054	Collar, instant stop
167	3-438-077	Cushion, shifter plate
168	3-438-080	Helical Spring
169	3-438-058	Bracket, roller holder
170	3-442-022	Helical Spring
171	3-442-030	Self Label
172	3-701-030	Sett maner

		Unit
Dark No	Description	Price
Part No. 12-2/187	134	
Y-20410-11-3	Topo Index Counter XI Type	
0-041-041	Weather real namel: white	
0-041-129	Pad erase playback and record head	
0-051-235	TITLE Debeinor	
3-401-179	Tue wire retainer	
3-401-482	Unchow annexes are a series and a series and a series are a series and a series are	
2-825-006	Mica Spacer, MD-17	
2-832-002	Bushing, insulating; F-1	
3-005-001	Spring, record head adjusting	
3-407-076	Retainer, washerScrew, head adjusting	
3-418-191	Nylon Washer	
3-419-098		
3-444-073	note to the contract and the contract of the c	
3-444-074	n (P) coningr	
3-444-075	The lating Plate in higher than the head	
3-444-077	Talding Diate lest Swifth	
3-444-078	Caring and an annual an annu	
3-444-084		
3-444-085	Chargie front name!	
3-444-523 3-444-524	Protocting Sheet dust cover	
3-444-603	Tagulating Plate binaural lack	
3-444-604	n 1 //\	
3-451-138	Table head mounting	
3-451-139	m . 0	•
3-451-159	41.1	•
3-460-075	Traham nulon	•
3-790-255-14	Instruction Manual	•
3-793 - 010	Booklet, tap talk	•
3-793-072-11	a walkaga indicating	-
3-103-191	Polyethylene Bag, accessories	_
3-701-020	Dea chack shoot essessessessessessessessessessessessess	_
3-444-605	Cover (C), jack plate	
- 100 220 02	Reel Cap, C	-
3-430-229-03	Pagi R-7A	-
8-860-107 1-534-049-31	Connection Cord RK-74	-
3-444-066	Dust Protector DP-355	-
3-444-067-04	Carton	-
3-444-068-03	Cushion side	-
3-444-069-01	Cushion, upper	-
3 444 007 01		

Ref.

No.

173 174

```
Description
Part No.
           Polyethylene Bag, dust protector -----
3-444-070
           Polyethylene Bag, set -----
3-442-027
           Pad Ass'y, non-skid -----
X-37010-20-2
           Tack Label, 60 Hz -----
3-701-062
           Caution Label, head -----
3-793-124
           Cleaner Ass'y, head -----
X-37010-18-2
           Tack Label. 50 Hz -----
3-701-061
                        -----
           Bag, accessory -
3-701-064
           Screw (+) P 2 x 4 -----
7-621-255-25
               (+) P 2 x 5 -----
7-621-255-35
               (+) P 2 x 8 -----
             11
7-621-255-55
             11
               (+) P 2 x 6 -----
7-621-255-45
             11
               (+) P 2.6 x 3 -----
7-621-259-12
               (+) P 2.6 x 4 -----
             11
7-621-259-22
               (+) P 2.6 x 5 -----
             11
7-621-259-32
                  P 2.6 x 5 -----
7-621-259-35
                (+)
                (+) P 2.6 x 6 -----
             11
7-621-259-45
                (+) P 3 x 5 -----
             11
7-621-261-32
                (+) P 3 x 5 -----
             11
7-621-261-35
                (+) P 3 x 6 -----
             11
7-621-261-45
                (+) P 3 x 10 -----
             11
7-621-261-65
                (+) P 3 x 10 -----
             11
7-621-261-62
             11
                (+) P 3 x 14 -----
7-621-261-85
             11
                (+) P 3 x 16 -----
7-621-262-05
                (+) P 4 x 6 -----
             11
7-621-268-45
                (+) P 4 x 8 -----
7-621-268-55
             11
                (+) P 4 x 12 -----
7-621-268-75
                (+) P 4 x 22 -----
             11
7-621-269-35
             11
                (+) P 3 x 6 (w/ spring washer) -----
7-628-251-25
7-628-251-35
                (+) P 3 x 8 (w/ spring washer) -----
             11
                (+) K 2.6 x 6 -----
7-621-559-42
             11
                (+) K 2.6 x 8 -----
7-621-559-55
                (-) K 2.6 x 22 -----
             **
7-621-510-32
                (+) B 3 x 6 -----
7-621-770-24
             * *
                (+) B 2.6 x 4 -----
7-621-770-36
                (+) B 2.6 x 12 -----
             11
7-621-770-52
                (+) B 3 x 6 -----
             11
7-621-770-22
             11
                (+) B 3 x 6 -----
7-621-770-49
             11
                (+) B 3 x 10 -----
7-621-770-40
             11
                (+) T 4 x 10 -----
7-621-468-65
                (-) SC 2 x 3 -----
             11
```

Ref.

No.

(-) SC 2 x 6 -----

11

7-621-710-25

7-621-710-56

Unit Price Description Part No. Set Screw (-) 2.6 x 6 -----7-621-712-56 (-) SC 3 x 3 -----7-621-713-16 Washer 2 6 -----7-623-105-12 2.6 \$ (small) -----7-623-107-02 2.6 \$ -----7-623-107-12 3 ø -----7-623-108-12 3 ø -----7-623-108-22 4 6 (small) -----7-623-110-02 7-623-110-12 7-623-112-12 5 \(\phi \) t=0.4 -----7-623-112-18 Spring Washer 2 6 -----7-623-205-22 2.6 \$ -----7-623-207-22 3 6 -----7-623-208-22 4 b -----" 7-623-210-22 3 **b** (internal) -----Star Washer 7-623-308-05 3 6 (external), -----7-623-408-05 Nut 2.6 6 -----7-622-107-02 3 6 -----7-622-108-02 " 4 b -----7-622-110-02 Lug 3 6 -----7-623-508-01 Retaining Ring E-3 -----7-624-106-01 E-4 -----7-624-108-01 ** 7-624-109-01

Ref.

No.

Ref. <u>No</u> .	Part No.	Description
		ELECTRICAL PARTS
		Transistor, 2SC632 Q101,201,102,202, 205,206,105,106
		" 2SC634 Q207,107,108,109, 103,104,208,209,
		210,211,110,111, 203,204,304,305
		" 2SD28 Q301,302,303
		Diode, 1T22 D101,201
		" 1T243M D301
		" FR-1P D302,303
El	1-427-217	Output Transformer T101,201
E 2	1-407-198	Micro Inductor 2.2 mH L301,302
E3	1-407-284	Coil, dummy L103,203
E4	1-433-122	Oscillator Transformer T302
E5	1-513-231-16	Switch, slide S104,204
E6	8-824-129-20	Record Head RP30-2902
E7	8-821-229-01	Playback Head PP30-2902A
E8	8-826-629-23	Erase Head EF18-2920H2
E9	8-832-624-09	Motor IC-624H1
E10	1-441-586	Power Transformer T301
E11	1-507-163	4 P Jack J201,203,101,103
E12	1-507-187	Jack, binaural USA Type J301
E13	1-507-188	Jack, microphone J102,202
E14	1-514-039-02	Micro Switch \$304
E15	1-514-057	Micro Switch S303
E16	1-514-306	Switch, seesaw S305
E17	1-514-324	Switch, slide \$103,203
E18	1-514-415-21	Slide Switch, mode S102,202
E19	1-514-416	Switch, rotary \$101,201,302
E20	1-518-093	Pilot Lamp PL301,101,201
E21 E22	1-524-051-21 1-533-048-21	Level Meter, stereo ME101,201,
	1-534-487	Fuse Holder
E23 E24	1-536-146	Cord, power supply
E25	1-536-147	Terminal Strips, A type 1L2
E26	1-536-149	Terminal Strips, A type 2L
E27	1-538-785-11	Printed Circuit Board, record amp
E28	1-538-784-12	Printed Circuit Board, playback amp
E29	1-538-783-11	Printed Circuit Board, playback amp Printed Circuit Board, power supply &
14 J	1 330 703 11	bias osc
E31	1-509-029-02	Connector, rec./p.b
E32	1-509-064	Socket, voltage selector
11 J L	1-532-163	Fuse, 0.8 A
	100	, , , , , , , , , , , , , , , , , ,

9/14 (TC-355 GENERAL EXPORT Model) (C3-11)

Unit Price

Ref. <u>No</u> .	Part No.	Description	Unit <u>Price</u>
E30	1-538-782-11 1-231-069 1-409-141 1-514-055 1-117-036	Printed Circuit Board, sub	
		Capacitor, mylar	
	1-106-058-12 1-105-661-12 1-106-082-12 1-105-673-12 1-106-084-12 1-105-674-12 1-106-092-12 1-105-678-12 1-106-102-12 1-105-683-12 1-106-110-12 1-105-661-12 1-105-661-12 1-105-667-12 1-105-679-12 1-105-679-12 1-105-845-12 1-105-759-12	0.001 μF 50 WV ±10 % C244,245,144,145 0.01 μF " " C119,219 0.012 μF " " C111,211 0.068 μF " " C112,212 0.15 μF " " C113,213 0.001 μF " " C233,234,133,134 0.0033 μF " " C232,228,132,128 0.1 μF " ±20 % C314 0.033 μF " " C315	
		Capacitor, silvered mica	
	1-107-054 1-107-056 1-107-221 1-107-004 1-107-035	33 pF 500 wV ±10 % C103,203 56 pF " C114,214 560 pF 1500 wV " C303 100 pF 500 wV " C311,312,143,243 560 pF " " C302	

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Ref.

No.

11/14 (TC-355 GENERAL EXPORT Model)
(C3-11)

11

RD1/4UR

R126,226 ----

R104,204 ----

11

11

 $8.2 k\Omega$

 $10 k\Omega$

1-242-695

1-242-697

Part No.	Descript	ion	, .		Unit <u>Price</u>
1-242-705-11 1-242-705-12)	22 kΩ	<u>+</u> 5 %	RD1/4UR, ELR1/4	R122,222	
1-242-705-31 1-242-705-32)	22 kΩ	<u>+</u> 10 %	11	R111,211	
1-242-712	$43 k\Omega$	±5 %	RD1/4UR	R117,217	
1-242-713-09	47 kΩ		"	R205,206,203, 106,103,105-	
1-242-713-11 1-242-713-12)	47 kΩ	11	RD1/4UR, ELR1/4	R109,209,121, 221	
1-242-717-09	68 kΩ	11	RD1/4UR	R110,210	
1-242-717-11	$68~k\Omega$	11	RD1/4UR, ELR1/4	R118,218	
1-242-737	470 kΩ	11	RD1/4UR	R116,216	
1-242-649	100 Ω	"	RD1/4UR, ELR1/4		
1 -2 42 - 6 5,7	220 Ω	11	11	R144,244	
1-242-665	470 Ω	11	"	R152,252	
1-242-669	680 Ω.	11	· 11	R154,254	
1-242-673	l kΩ	"	. 11	R138,238	
1-242-681	$2.2 k\Omega$	11	11 11	R158,258	
1-242-683	$2.7 k\Omega$	"	11	R150,250	
1-242 -685	$3.3 \text{ k}\Omega$	"	11	R163,263	
1-242-692	$6.2 \text{ k}\Omega$	11	11	R155,255	
1-242-693	$6.8 \text{ k}\Omega$	±10 %	11	R139,239	
1-242-697-09	10 κΩ	±5 %	11	R131,231	
1-242-699	12 kΩ	,,		R245,246,145,	
. 0/0 701	15 1.0	+10 %	H. C.	R134,234	
1-242-701	15 kΩ	±10 %			
1-242-705-32 1-242-705-31	22 kΩ	**	н	R133,233	
1-242-705-11 1-242-705-12)	$22 k\Omega$	11	"	R153,253	
1-242-703-12	27 kΩ	11	RD1/4UR	R148,248	
1-242-709	33 kΩ	11	RD1/4UR, ELR1/4	R156,256	
1-242-713	47 kΩ	11	íi	R243,251,143,	
1 2,0 , 10				151	•
1-242-719	82 kΩ	11	RD1/4UR	R128,228	
1-242-671	820 Ω	11	11	R107,207	•
1-242-723	120 kΩ	11	RD1/4UR, ELR1/4	R149,249	•
1-242-725	150 kΩ	11	11	R135,235	
1-242-733	330 kΩ	11	11	R130,230	
1-242-735	390 kΩ	11	RD1/4UR	R132,232,147,	
				247	
1-242-737	470 kΩ	"	RD1/4UR, $ELR1/4$		
				262,242,257,	
				261,161,162,	
				241	
1-242-697-31	10 kΩ	. 13	11	R165,265	•
		12/14 (TC-355 GENERAL EX	PORT Model)	

(C3-11)

Ref.

5 N	December 1	Unit				
Part No.	Description	<u>Price</u>				
1-242-747 1-242-625 1-242-641 1-242-699 1-242-713 1-242-719 1-242-721 1-244-81 1-244-689 1-244-705 1-244-739 1-244-843 1-244-673 1-244-697	$\begin{array}{cccccccccccccccccccccccccccccccccccc$					
	Capacitor, polyethylene					
	dapacted, polycenylene					
1-129-659 1-129-665 1-129-663	270 pF 50 WV ±10 % C135,235 820 pF " C305,306 560 pF " C120,220					
	Encapsulsted Component					
1-101-534-12	0.1 μF+120 Ω CP301,302					
	<pre>Capacitor, trimmer (patting type)</pre>					
	dapacted, crimmer (paceting type)					
1-141-076	30 -200 pF C142,242					
•						
	Variator Resistor					
1-221-923 1-222-119	200 kΩ R113,213 R310, S301					
	Capacitor, polystyrol					
1-103-675	1000 pF 50 WV ±10 % C301					

Ref. <u>No</u>.

13/14 (TC-355% GENERAL EXPORT Model)